

LOGGERHEADLINES

Sea Turtle News from South Carolina

August - October, 2002

Greetings!

The sea turtle season is drawing to a close. As we bid farewell to the hatchlings, most of the news is encouraging, as you will read in this issue of *Loggerheadlines*.

Strandings

There were 18 strandings in the past three months compared to 17 during the single month of April. August was below average (7) while September was above average (6). The numbers of strandings each October vary due to cooler water temperatures which influences when turtles begin to move offshore. This season, October strandings were higher than the last three years, but lower than 1997 and 1998. As of the end of October, the total annual strandings were 111, the lowest since 1994.

Dense leatherback concentrations along the South Carolina coast resulted in leatherback TEDs being required from April 26th to May 24th 2002. On May 24th, the National Marine Fisheries Service (NMFS) issued emergency rule that required leatherback TEDs in the southeastern coastal waters for 30 days because of the high number of strandings in Georgia. So leatherback TEDs were required in South Carolina for approximately two months. According to our Marine Patrol officers, some shrimp trawlers continued to use leatherback TEDs. The new requirement for larger TED openings in South Carolina also came on line after the NMFS emergency rule expired.

In 2001, 24 out of 86 stranded loggerheads were adults (27.9%) compared to 15 out of 82 (18.3%) in 2002. This decline is encouraging, but adults are still over-represented in strandings when compared to their numbers in the population.

Rehabilitation

The loggerhead, found stranded at the Charleston City Marina, and transported to the Marine Science Center at Daytona Beach, Florida for extended care, is doing well. **Michelle Bauer**, says "**Nubbie**" is eating 800-900 grams of everything now, but seems to be gaining weight slower that they would like. His blood work is improving, but he is still on the anemic side.

"Hilton", a 17-inch Kemp's ridley was found floating, with a cracked shell on Hilton Head Island on June 6th, 2002. **Kim Washok** drove the turtle to the Karen Beasley Sea Turtle Rescue and Rehabilitation Center in Topsail, NC. "Hilton" was rehabilitated and released on September 18, 2002, at Topsail. Bon voyage, "Hilton"!

"Edisto Mama", an adult, female loggerhead was found on September 18th, 2002 floating near Edisto Beach. Charlotte Hope took her to the South Carolina Aquarium for rehabilitation. On October 2nd an endoscopic exam was performed to locate the source of infection. Cultures were taken, antibiotics were flushed into the body cavity and some of the trapped gas was expelled. Currently she is still floating, but not as high as when she was brought in. This robust and active 240+ lbs. turtle is in good health otherwise, and we hope to release her this year.

Necropsy Summary

From August through October, post-mortems were performed on four sea turtles: two loggerheads, one green, and one Kemp's ridley. Three died acutely, one of which was a boat strike and the other two were healthy animals with no apparent injuries, so drowning is suspected. One died chronically. Its front flippers were bitten off (by a shark) fairly recently, but the wounds were healing. However, the animal could not feed effectively due to its injuries and became emaciated and a "floater". A boat strike was the ultimate cause of death for this turtle.

Nesting News

A green turtle nested right in the middle of the beach renourishment project at Garden City in early September. Because of this, the nest was moved to Huntington Beach State Park. It is due to hatch in early November.

Nesting Update

Usually in this spot, we compare each project's nesting effort with the previous year. At the request of some, and because we felt it would be more interesting, we have developed a table that contains the nesting effort for each of the projects over the last five years. This allows for comparison of annual variability in nesting within projects as well as between projects. I think you will find this table fascinating and it may bring up more questions than answers. See "Nesting Data History" at the end of this issue.

Regional News

North Carolina

Dr. Matthew Godfrey, North Carolina Sea Turtle Coordinator, reports that there are still several nests incubating on the beaches of the Outer Banks, so they do not have a final total yet, but it will probably be close to 625 nests for the year. This is a bit lower than the annual average of 757 (based on the previous 12 years), but still within the normal fluctuation seen in North Carolina. Negotiations with the

North Carolina electric utility CP&L and the town of Carolina Beach have resulted in a lighting-reduction plan for all public beachside lights and lamps. They hope it will be the model for the remaining municipalities in North Carolina where lighting problems still exist.

North Carolina to date has reported 391 sea turtle strandings for 2002. This is up from the previous year, but so far the past three months have shown a decrease in stranding numbers compared to 2001. The strandings have been mostly loggerheads, with some greens and Kemp's ridleys as well. A few leatherback strandings have also been reported in the past few months.

Eleven turtles were released from the Sea Turtle Hospital in Topsail Beach in September after varying lengths of rehabilitation.

<u>Georgia</u>

Mark Dodd, Georgia Sea Turtle Coordinator, reports that in 2002, they documented a total of 1,012 loggerhead nests, only 9 nests below of their 13-year mean 1,021 nests. Approximately 50% of the state's nesting is concentrated in three primary rookeries: Cumberland, Blackbeard. and Ossabaw Islands. Following a large-scale stranding event in the spring (93 strandings in two weeks), weekly stranding totals have remained approximately half the 13-year average.

Kemp's Ridley Nesting Numbers

Sandy MacPherson, National Sea Turtle Coordinator with the U.S. Fish and Wildlife Service, sends this update from the Kemp's Ridley Working Group meeting. This year marks the 25th year of the bi-national Mexico/United States cooperative Kemp's ridley sea turtle restoration project. According to preliminary reports, 6,436 nests were documented in Mexico this season. An additional 40 nests were documented in the U.S. (38 in Texas and 2 in Florida).

Research

Satellite Tracking of Nesting Loggerheads

On the night of July 7th, coastal staff of the Wildlife Diversity Section of DNR assisted by Cape Romain staff attached satellite transmitters to five nesting females. The goal of the project is to determine post-nesting movements, migration routes, and the size and location of foraging areas. Maps of the turtles can be seen at the Caribbean Conservation Corporation web site www.cccturtle.org/sat-sc-2002.htm Signals from the four turtles that migrated north became very intermittent, due mostly to more time "off" in the duty cycle. This was done to save on battery use in order to lengthen the life of the units. On October 30th, the duty cycle changed back to more "on" time, and the signals showed that two of the turtles. "Sarah" and "Celeste" have begun their migration back south.

Success Stories

<u>Town of Edisto Beach</u> – Our education program continues to be an important part of our program. We gave a talk every week during the summer months at Fairfield Ocean Ridge. This program was open to beach visitors and local people and was very well attended. It amazed us how interested everyone was in the loggerhead turtles and our program. We were able to share much information. – *Judy Hartman*

<u>Edingsville Beach</u> – Our success story is the "ladies"; the number of nests is up substantially from last year. – *Doug Henley*

<u>Hilton Head Island</u> – Nothing that exciting happened, maybe that's our "success", that the season went off pretty much without a hitch. – *Kim Washok*

<u>Seabrook Island</u> – We had 32 nests, the highest number in nine years. – *Beautsie Zahrn*

<u>Huntington Beach State Park</u> – We had a nest (laid 6/18) where erosion had washed out the

side of the egg chamber, exposing the eggs. It was relocated on 8/10 and had a 99% hatch rate. – *Mike Walker*

Edisto Beach State Park – Our success story is the low number of false crawls this year. The Park has put forth a tremendous effort to educate our visitors and we also designated all of our beach front camping sites as "light sensitive" sites, which meant that no lights, either interior or exterior, could be visible from the beach after 10 pm. We also "asked" each camper to refrain from going on the beach after 10 pm. The response was overwhelming and our beach was virtually deserted. We have a lot of "repeat" campers, so I am hopeful that our efforts will pay off in future years. – Elaine Freeman

<u>Folly Beach</u> – One small nest with only 66 eggs was moved the day it was laid to a higher site, which we thought, would be safe. But several weeks later, ominous high tides threatened it again and so we reluctantly moved it again, thinking there would be no survivors. However, at inventory time, 55 of the 66 eggs had successfully hatched. – *Carole Bennett*

<u>Kiawah Island</u> – We made the decision, after the May erosion, not to leave any more in situ nests in our zones 1 through 9. By doing this we avoided the washout of many nests. Also the collaboration with Duke Marine Laboratory was a success. – *Jack Hamilton*

<u>Dewees Island</u> – Our "fun" success story was the use of SCUBA masks during inventories on extremely windy days. It eliminates the problem of sand in the nose and eyes. – *Arla Jessen*

<u>Pritchards Island</u> – A less-than-success story. The new Beaufort County Lighting Ordinance had little to no effect on lights from Fripp Island, which were visible all summer long. We have a spring meeting planned to put into action more public announcements, lighting displays in local hardware stores, and the beginning of some enforcement using warning tickets. – *Amber Von Harten*

While on the subject of lights...the October 2002 issue of *National Geographic Magazine* contained the following article:

"Dark Victory"

The night skies over central Europe just got a little darker. The Czech Republic has become the first country in the world to enact a national law against light pollution.

A growing problem worldwide, light pollution is caused by bright nighttime lighting that disperses beyond the area intended. In cities, lights that project upward can obscure the stars and planets, a problem for astronomers. But stargazers aren't the only ones affected. Glare caused by poorly designed light fixtures also degrades visibility for drivers and pedestrians.

Jenik Hollan, an astronomer at the Nicolaus Copernicus observatory in Brno, has already noticed improvement on the streets, if not yet in the skies. "Everything is much more visible, with reduced glare," he says.

If this can be done in the Czech Republic, why not in coastal South Carolina?

Announcements & Events

The 23rd Annual Symposium on Sea Turtle Biology and Conservation will be held in Kuala Lumpur, Malaysia, from March 17-21, 2003. This will also be the first symposium under the sponsorship of the new International Sea Turtle Society. Details about the symposium can be found on the Internet at http://www.seaturtle.org/symposium/.

Goodbye to the Kinne's

Ivan and Rita Kinne have decided to move closer to family and grandchildren, and expect to leave for Fort Collins, Colorado this month. They have made an invaluable contribution to the project on Harbor Island, serving as project leaders as well as marine mammal and sea turtle stranding volunteers. We wish them much happiness in their new surroundings!

Hello to DuBose Griffin

Good news! A new grant has provided funds to enable DuBose Griffin to come on board as a full-time member of our staff (for at least two years). In May of this year she was awarded a Master of Science degree in Environmental Studies and also received the outstanding graduate student award in the MES program. Many of you have met DuBose at the Spring Training Workshop or when she came to pick up a carcass or injured turtle. She will be using her expertise in GIS to map spatial and temporal trends for sea turtles, eagles, and other coastal species for use by the scientific community as well as coastal planners. She will also still be your contact at the Sea Turtle Desk.

Telephone Number Change

Effective Monday, August 12, we have **new phone and fax numbers**. Area Code is 843. Phone:

Sally 953-9014 Joan 953-9015 DuBose 953-9016 Charlotte 953-9017 Fax: 953-9353.

Sally Murphy, State Coordinator
Charlotte Hope, Biologist
DuBose Griffin, GIS Analyst, Sea Turtle Desk

Joan Seithel, *Technical Assistant*If you have questions or comments, please contact:

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Thanks!

As we near the Thanksgiving holidays there is a lot to be thankful for this sea turtle season: strandings were down, nesting was up, there were no hurricanes, and spring tides did not destroy many nests. We at SCDNR Marine Turtle Program are thankful for all of you and the work you do for sea turtle conservation. Enjoy the holidays and have a restful winter. See you all next spring.

Sally, Tom, Charlotte, DuBose, & Joan

